**Discussion on blowing your own canopy, using polycarbonate:**

Peter Knockaert [<peter.knockaert2@telenet.be>](mailto:peter.knockaert2@telenet.be) wrote:

*“Is there anyone who has information to build the canopy itself.*

*I belief the best is polycarbonate with a thickness of 5 mm.*

*In attach my drawing of the mold, to shape the polycarbonate with heat and vacuum.”*



**Beagle sent a note privately:** *You can spend so much money buying plastic, ruining it and then doing it again, so I think you should talk to the guys in France - they don't likely get their canopies in the United States - they must have a source there.    
  
I'd start with this guy:  
  
03 PRADUROUX, WALTER 45 Rue des Aigues Marines, 34250 Palavas-Les-Flots, France 33467 680778* [*pradwalter@free.fr*](mailto:pradwalter@free.fr) *Instructor Long EZ:F-PURL O-320-E2C 40 hrs “Le Nid des Canards”* [*http://v2.ez.org/montpellier.htm*](http://v2.ez.org/montpellier.htm) *Montpellier Mediterranee Airport (LFMT)   
  
Beagle*

*I have some rather interesting canopy photos of the French Cozy aircraft - lots of variation there.*

**Kent Ashton replied:** *“Never blown a canopy but I have polycarbonate on a bike windscreen and it is easier to scratch than plexiglass and harder to polish out. It also has to be dried before blowing because moisture left in it will form bubbles. Polycarbonate is used in fighters for bird-strike protection but it’s not easy to work with. Also canopy mold must be perfect or it will imprint imperfections. I have molded little things like fuel guages on a flannel-covered mold and the flannel imprints.*

*I think you are better off trying to blow an acrylic (plexiglass) canopy. I save some videos here*

[*http://www.canardzone.com/forum/topic/18661-kents-long-ez-project/?p=61486*](http://www.canardzone.com/forum/topic/18661-kents-long-ez-project/?p=61486)

*and there are some more references here*

[*http://www.homebuiltairplanes.com/forums/showthread.php?t=23800&highlight=*](http://www.homebuiltairplanes.com/forums/showthread.php?t=23800&highlight=) *“*

**Steve Strouk added:** *“Polycarb is very tricky in a home shop. It absorbs moisture, and needs careful, gently drying before you can even think of forming it - and it takes close to 145C to make that happen, when I've drape formed it at least.”*

**Tom Brusehaver added: *“****I believe in Central States newsletter, maybe 1997 there was an article about a guy who built his own. He actually made two, because it was easier to build symmetrical items. It took a couple tries, but I think it ended up being only slightly cheaper than buying one pre-made.  I don't remember the details.”*

***Beagle catalogued many of the Central* States articles on canopies in my library – sent this:**

18CS9: Jul 1995, CS39/18: "Oversize Long-EZ Canopy" - Alan Arnold.

18CS13: Jul 1998, CS51/16: "Back to Homebuilder Basics" - a way to avoid the high cost of canopies.

18CS14: Jul 1998, CS51/10,11 "Free Form Custom Canopy" by Alan Borman.

18CS15: Apr 2002, CS66/13: “Volovsek Long-EZ” and “History of the French Canopy” on Wide Canopy installation by Ernest Graineau & Terry Schubert

3CS44: Apr 1996, CS42/24: “French Varie-Eze F-PBJL” of Ernest Magallon Graineau – showing wider canopy

31CZ1: Jul 2002, CZ78/9 “Head Room” on tall pilots - Puffer

18SA2: Apr 1992, page 52: "Working with Plexiglass Canopies".

18SA6: May 1995, page 75: "The Airplane Plastics Company - If It Can Be Formed, They Form It." On canopy forming.

18SA7: Jan 2002, page 94: “Blowing Your Own – Making an Aircraft canopy” by Paul Moffatt